

UMO 1512.2
PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application of: Henry W. White et al.
Serial No.: Not yet assigned
Filed: Herewith
For PROCESS FOR PREPARING P-N JUNCTIONS HAVING A P-TYPE ZnO FILM

July 8, 2003

TO THE COMMISSIONER OF PATENTS AND TRADEMARKS,

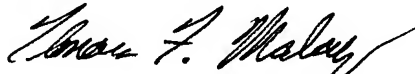
SIR/MADAM:

INFORMATION DISCLOSURE STATEMENT

In accordance with 37 C.F.R. 1.97 and 1.98 and MPEP 609, and in compliance with the duty of disclosure set forth in 37 C.F.R. 1.56, applicants submit the references listed on the attached PTO/SB/08A for consideration by the Patent and Trademark Office in the above-entitled application and to be made of record therein.

The references listed on the attached PTO-1449 were previously cited by or submitted to the Office in parent application Serial No. 10/002,790 and, therefore, in accordance with MPEP 609, are not being provided at this time.

Respectfully submitted,



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PTO/SB/08A INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)				Complete if Known	
				Application Number	Not Yet Assigned
				Filing Date	Herewith
				First Named Inventor	Henry W. White
Sheet	1	of	3	Attorney Docket No.	UMO 1512.2

U.S. PATENT DOCUMENTS

Examiner Initials*	Cite No. ¹	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY
		Number	Kind Code ² (if known)		
	1	3,713,822		Kiess	01-30-1973
	2	3,728,784		Schmidt	04-24-1973
	3	3,728,785		Schmidt	04-24-1973
	4	3,801,384		Schmidt	04-02-1974
	5	4,626,322		Switzer	12-02-1986
	6	5,141,564		Chen et al.	08-25-1992
	7	5,274,251		Ota et al.	12-28-1993
	8	5,248,631		Park et al.	09-28-1993
	9	5,574,296		Park et al.	11-12-1996
	10	5,620,557		Manabe et al.	04-15-1997
	11	5,679,965		Schetzina	10-21-1997
	12	5,689,123		Major et al.	11-18-1997
	13	5,846,844		Akasaki et al.	12-08-1998

FOREIGN PATENT DOCUMENTS

Examiner Initials*	Cite No. ¹	Foreign Patent Document			Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	T ⁶
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¹Unique citation designation number. ²See attached Kinds of U.S. Patent Documents. ³Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶Applicant is to place a check mark here if English language Translation is attached.

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	14	EPO	EP 0 863 555	A2	Masashi et al.	09-09-1998	
	15	PCT	WO 00/08691		White et al.	02-17-2000	

OTHER ART - NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.) date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ⁶
	16	BAGNALL et al., Optically pumped lasing of ZnO at room temperature, <i>Appl. Phys. Lett.</i> , April 1997, pp. 2230-32, Vol. 70, No. 17	
	17	CRACIUN et al., Growth of ZnO thin films on GaAs by pulsed laser deposition, <i>Thin Solid Films</i> , 1995, pp. 1-4	
	18	GUNSHOR et al., Blue-green laser-diode technology moves ahead, <i>Laser Focus World</i> , March 1995, pp. 97-100	
	19	HIRAMATSU et al., Transparent conducting ZnO thin films prepared by XeCl excimer laser ablation, <i>J. Vac. Sci. Technol.</i> , Mar/Apr. 1998, pp. 669-73, Vol. 16, No. 2	
	20	MINEGISHI et al., Growth of p-type Zinc Oxide Films by Chemical Vapor Deposition", <i>J. Appl. Phys.</i> , 1997, pp. 1453-55, Vol. 36, Pt. 2, No. 11A	
	21	JOSEPH et al., p-Type Electrical Conduction in ZnO Thin Films by Ga and N Codoping, <i>Jpn. J. Appl. Phys.</i> , November, 1999, pp. L1205-07, Vol. 38, Part 2, No. 11A, Japanese Journal of Applied Sciences	
	22	MOHAMMAD et al., Reactive Molecular-Beam Epitaxy for Wurzite GaN, <i>MRS Bulletin</i> , Feb. 1997, pp. 22-28	
	23	NAKAMURA, Blue-Green Light Emitting Diodes and Violet Laser Diodes, <i>MRS Bulletin</i> , Feb. 1997, pp. 29-35	
	24	OHTOMO et al., Mg _x Zn _{1-x} as a II-VI widegap semiconductor alloy, <i>Appl. Phys. Lett.</i> , May 1998, pp. 2466-68, Vol. 72, No. 19	
	25	PEARTON et al., GaN and Related Materials for Device Applications, <i>MRS Bulletin</i> , Feb. 1997, pp. 17-21	
	26	PONCE, Defects and Interfaces in GaN Epitaxy, <i>MRS Bulletin</i> , Feb. 1997, pp. 51-57	

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	27	REYNOLDS et al., Similarities In The Bandedge And Deep-Centre Photoluminescence Mechanisms of ZnO and GaN, <i>Solid State Comm.</i> , 1997, pp. 643-46, Vol. 101, No. 9	
	28	SHUR et al., GaN/AlGaIn Heterostructure Devices: Photodetectors and Field-Effect Transistors, <i>MRS Bulletin</i> , Feb. 1997, pp. 44-50	
	29	ZOLPER et al., Implantation and Dry Etching of Group-III-Nitride Semiconductors, <i>MRS Bulletin</i> , Feb. 1997, pp. 36-43	
	30	International Search Report, PCT/US 99/17486	
	31	International Search Report, PCT/US00/41952	

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